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FEDERAL COMMUNICATIONS COMMISSION
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JUL 24 1995

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

Mr. Peter A. Rohrbach
Hogan and Hartson
Columbia Square
555 Thirteenth Street, NW
Washington, DC 20004-1109

EX PARTE OR LATE FILED

Dear Mr. Rohrbach:


This is in response to your request on behalf of VORAD Safety Systems, Inc. for an extension of a waiver of Section 15.245 of the FCC rules. The waiver granted on September 20, 1993, permitted operation of the VORAD vehicle detection and alert system at 24.725 GHz plus or minus 50 MHz rather than 24.125 GHz. Among other conditions, the waiver applied only to units manufactured before September 20, 1995. Your request asks that the waiver be extended for a two-year period to September 20, 1997.

The Commission granted the VORAD waiver request based on the potential benefits of the system and on the minimal risk of interference to authorized radio services. We stated that General Motors had filed a petition for rulemaking to allow similar operations in the 76-77 GHz band and specified that future waivers, as well as an extension of the waiver beyond the initial time period, would be dependent upon the outcome of the NPRM. On October 20, 1994, the Commission issued an NPRM in ET Docket 94-124, to permit use of radio frequencies above 40 GHz for new radio applications; however, no decisions have been finalized.

We find that the potential benefits of the VORAD system and low risk of interference under present conditions are favorable to granting VORAD's extension request. Accordingly, the waiver of Section 15.245 granted to VORAD Safety Systems is extended to apply to units manufactured before September 20, 1997. All other conditions of the original waiver dated September 20, 1993, remain in effect.

I trust that this responds to your request. If you have additional questions you may contact Anthony Serafini at (202) 776-1628.

Sincerely,



Richard M. Smith
Chief
Office of Engineering and Technology

No. of Copies rec'd _____
List A B C D E

cc: Chief, OET
Bill Torak
Richard Engelman
Dockets for inclusion in ET 94-124 (with incoming) ✓
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May 30, 1995

BY HAND DELIVERY

Mr. Richard M. Smith
Chief, Office of Engineering and Technology
Federal Communications Commission
2025 M Street, N.W., Room 7002
Washington, D.C. 20554

**Re: Request of VORAD Safety Systems, Inc. for
Extension of Waiver of Section 15.245**

Dear Mr. Smith:

VORAD Safety Systems, Inc. ("VORAD"), by its attorneys, hereby requests a two-year extension of the waiver of Section 15.245 of the Commission's rules that VORAD was granted on September 20, 1993. See letter of Thomas P. Stanley to Susan Wing, dated Sept. 20, 1993 ("VORAD Waiver"). The waiver authorized VORAD to operate its radar-based vehicle detection and driver alert system at 24.725 GHz, rather than at 24.125 GHz, the frequency specified in Section 15.245 for field disturbance sensors.

As VORAD explained in its original waiver request, the VORAD system enhances traffic safety by using radar to monitor the speed and position of objects ahead of the vehicle and warning the driver if it senses a potential hazard. In testing the system at 24.125 GHz, however, VORAD discovered that operation of its system unintentionally activates police radar detection devices, which share that band. As a result, drivers using the VORAD system received complaints from other drivers. VORAD proposed operation in the 24.725 GHz band because it discovered that the band was not being actively used.¹

¹ The Federal Aviation Administration was operating its Airport Surface Detection Equipment ("ASDE") in the 23.8-24.27 GHz band at 11 airports at the time VORAD requested its initial waiver. However, the FAA was phasing out use of that band and transitioning ASDE to the 15.7-16.2 GHz band. See VORAD Waiver at 2. VORAD has confirmed with the FAA's spectrum management

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Based on its review of VORAD's application, the Commission concluded that grant of a waiver was justified due to "the potential benefits of VORAD's warning system to the public and the lack of any significant potential of harmful interference to other radio services." VORAD Waiver at 2.

VORAD's operations have clearly borne out the Commission's expectations. VORAD's system has proven to be a significant factor in preventing accidents. Greyhound Lines, Inc. installed VORAD equipment operating at 24.125 GHz on its bus fleet and experienced more than a 20 percent reduction in accidents -- its lowest level in 25 years -- which it attributed to the effectiveness of the VORAD system. Furthermore, VORAD has received no complaints of harmful interference resulting from its operations.

In addition to modifying its original collision warning system to operate at 24.725 GHz pursuant to the waiver, VORAD has also worked with Eaton Corporation, one of VORAD's major investors, to develop a next generation radar system. This system, which is designed for the heavy truck market, will incorporate a major enhancement -- Eaton VORAD's SmartCruise.™ This feature involves interaction between the radar system and the vehicle's cruise control to automatically maintain a safe following distance. In other words, the system will permit the driver to remain a constant distance behind other vehicles without disengaging the cruise control.

Extension of VORAD's waiver is appropriate because the proceeding initiated by the Commission to determine whether to allocate new frequency bands for vehicle radar systems is still pending. In acting on VORAD's initial waiver request, the Commission noted that General Motors Corporation had filed a petition

personnel that the phase-out of the 23.8-24.27 GHz band is continuing, with ASDE currently operating in that band at only five airports. Furthermore, VORAD informed the Commission at the time of its initial waiver request that because of the technical characteristics of the ASDE system and the separation between the ASDE frequencies and VORAD's proposed band, it was highly unlikely that operation of VORAD's equipment could cause harmful interference to ASDE. Id. Since the waiver was granted, VORAD has received no reports of interference at airports with ASDE operating in the 23.8-24.27 GHz band.

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for rulemaking asking the Commission to permit operation of vehicle radar systems in the 76-77 GHz band. The Commission stated that any extension of VORAD's waiver, or action on any other waiver requests for vehicle radar systems, would depend on the outcome of the NPRM. VORAD Waiver at 3.

Since VORAD's waiver was granted the Commission has published the NPRM² and received comments regarding its spectrum proposals. However, no action regarding new frequency allocations for vehicle radar systems has been taken. If and when additional frequencies are allocated, there will be a period of delay before equipment designed to operate on those frequencies can be designed, manufactured, and made available to customers. Furthermore, VORAD has requested that the Commission consider permitting continued use of the 24.725 GHz band for vehicle radar systems, in addition to the above 40 GHz bands the Commission has proposed allocating for this purpose in the NPRM.³ Extension of VORAD's waiver is necessary to permit it to continue current and planned production of its radar system pending resolution of these spectrum allocation issues.

VORAD's driver alert system has proven to be effective in reducing accidents, and operation of the system pursuant to the Commission's waiver of Section 15.245 has not produced any complaints of harmful interference. For these reasons, VORAD respectfully submits that extension of the waiver for a two-year period to September 20, 1997 would serve the public interest, and asks that its request for extension be granted.

² See Amendment of Parts 2 and 15 of the Commission's Rules to Permit Use of Radio Frequencies Above 40 GHz for New Radio Applications, 9 FCC Rcd 7078 (1994).

³ VORAD Comments at 1, ET Docket No. 94-124, RM-8308 (filed Jan. 30, 1995).

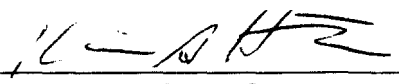
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Please address any questions regarding this request to the undersigned.

Respectfully submitted,

VORAD Safety Systems, Inc.

By 
Peter A. Rohrbach
Karis A. Hastings

Its Attorneys

cc: Mr. Michael J. Marcus
Associate Chief for Technology, OET

Mr. Richard Engelman
Chief, Technical Standards Branch, OET